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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,193	12/03/2003	Bernard E. Brady JR.	M0929.70003US00	4674
46630 EMC Corporati	7590 08/13/200 on	EXAMINER		
c/o WOLF, GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE			MACILWINEN, JOHN MOORE JAIN	
BOSTON, MA			ART UNIT	PAPER NUMBER
			2442	
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			08/13/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/727,193	BRADY ET AL.
Office Action Summary	Examiner	Art Unit
	John M. Macllwinen	2442
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION (36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 14 Journal 2a) This action is FINAL . 2b) This 3) Since this application is in condition for allowanclosed in accordance with the practice under Expression 1.	s action is non-final. nce except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 129-182 is/are pending in the applica 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 129-182 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration. or election requirement.	
10) The drawing(s) filed on is/are: a) accomposition and accomposition accomposition and accomposition accomposition and accomposition accomposition and accomposition a	epted or b) objected to by the I drawing(s) be held in abeyance. See tion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. ☐ Copies of the certified copies of the prio application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 7/7/2009, 7/14/2009.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate

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DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments filed 7/7/2009 have been fully considered but are moot as said arguments are directed to cancelled claims.
- 2. Applicant's arguments filed 7/7/2009 address currently canceled claim 1, beginning on page 17 stating that the Applicant "would like to discuss . . . claim 1 . . ." and concluding on page 20 with ". . . in order to read the disclosure . . . onto claim 1 . . .". Applicant's arguments thus are directed to cancelled claim 1, and thus are not persuasive.

Response to Amendment

3. Applicant's amendment, filed 7/07/2009, attempts to present claims 129 through 180. However, Applicant's claims are numbered incorrectly; claims 157, 164 and 176 each appear twice and there is no claim 179. Applicant's claims thus have been renumbered correctly, said renumbering included attached appendix. Applicant's claims are addressed utilizing the corrected claim numbering. Thus, currently pending are claims 129 – 182.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter for the reasons given below in the 35 USC 112 written description rejection. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

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Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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6. Claims 136, 159 and 172 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Said claims recite "an index indicating how to enter … transmission events unabridged".

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 129 135, 137 140, 142 145, 148 154, 156 158, 160 171, 173 176 and 178 179 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar (US 7,127,743 B1) in view of Wiley (US 7,017,185 B1).
- Regarding claim 129, Khanolkar shows a method comprising
 collecting (Fig. 2, item 58) a plurality of transmission events provided by one or

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more nodes of a network (Fig. 1, items 11 - 16 providing said events) into one or more data structures (col. 4 lines 21 - 28)

Khanolkar does not show all of creating one or more characterization records for at least one or more data structure of said one or more data structures, one or more transmission events of said plurality of the transmission events being collected to said at least one data structure of said one or more data structures, wherein at least one of said one or more characterization records comprises one or more indicators of a location or locations of one or more data elements comprised in at least one of said one or more transmission events, to allow accessing said at least one of the one or more characterization records to determine said or more indicators of the location or locations of said one or more data elements.

Wiley shows creating one or more characterization records (represented by Wiley's keysets, col. 4 lines 51 - 58) for at least one or more data structure of said one or more data structures, one or more transmission events of said plurality of the transmission events being collected to said at least one data structure of said one or more data structures, wherein at least one of said one or more characterization records comprises one or more indicators of a location or locations of one or more data elements comprised in at least one of said one or more transmission events, to allow accessing said at least one of the one or more characterization records to determine said or more indicators of the location or locations of said one or more data elements (col. 5 lines 8 - 67, col. 7 lines 35 - 51).

It would have been obvious to one of ordinary skill in the art at the time of the

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invention to modify the disclosure of Khanolkar with that of Wiley in order to provide faster access to stored data (Wiley, col. 2 lines 17 - 28).

10. Regarding claim 148, Khanolkar in view of Wiley further show an apparatus comprising a first controller, configured to perform collecting a plurality of transmission events provided by one or more nodes of a network into one or more data structures (Khanolkar, Figs. 1 and 2, col. 4 lines 21 – 28); and

a second controller, configured to create one or more characterization records for at least one data structure of said characterization records for at least one data structure of said one or more data structures, one or more transmission events of said plurality of the transmission events being collected to said at least one data structure of said one or more data structures, wherein at least one of said one or more characterization records comprises one or more indicators of a location or locations of one or more data elements comprised in at least one of said one or more transmission events, to allow accessing said at least one of the one or more characterization records to determine said one or more indicators of the location or locations of said one or more data elements (Wiley, col. 5 lines 8 – 67, col. 7 lines 35 – 51).

11. Regarding claim 166, Khanolkar in view of Wiley further show a computer software product comprising a computer useable medium having computer readable instructions stored thereon for execution by a processor to perform a method comprising:

collecting a plurality of transmission events provided by one or more nodes of a network into one or more data structures (Khanolkar, Figs. 1 and 2, col. 4 lines 21 – 28);

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and

creating one or more characterization records for at least one data structure of said characterization records for at least one data structure of said one or more data structures, one or more transmission events of said plurality of the transmission events being collected to said at least one data structure of said one or more data structures, wherein at least one of said one or more characterization records comprises one or more indicators of a location or locations of one or more data elements comprised in at least one of said one or more transmission events, to allow accessing said at least one of the one or more characterization records to determine said one or more indicators of the location or locations of said one or more data elements (Wiley, col. 5 lines 8-67, col. 7 lines 35-51).

- 12. Regarding claim 130, Khanolkar in view of Wiley further show wherein said collecting and said creating is performed by a site of a plurality of sites comprised in said network (Khanolkar, Fig. 1, col. 1 line 48 col. 2 line 10).
- 13. Regarding claims 131, 157 and 167, Khanolkar in view of Wiley further show wherein said one or more data elements are stored within said at least one data structure (Khanolkar, col. 4 lines 21 30, col. 5 line 65 col. 6 line 14).
- 14. Regarding claims 132, 149 and 168, Khanolkar in view of Wiley further show wherein said collecting comprises creating observation records of said plurality of the transmission events and storing said observation records in said one or more data structures, such that said at least one data structure of said one or more data structures comprises one or more observation records of said observation records created using

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line 21).

one or more transmission events of said plurality of transmission events, said one or more observation records being generated using one or more characteristics of said one or more transmission events in order to allow entering said one or more observation records to determine whether at least one of said one or more characteristics is present in said at least one data structure (Khanolkar, col. 4 lines 21 – 55, col. 5 line 65 – col. 6

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- 15. Regarding claims 133, 151 and 169, Khanolkar in view of Wiley further show wherein said one or more characteristics of said one or more transmission events are one or more of: a period during which a transmission event of said one or more transmission events is occurred, and an internet protocol address of a node of said one or more nodes transmitted said transmission event (Khanolkar, col. 2 lines 32 37).
- 16. Regarding claims 134, 152 and 170, Khanolkar in view of Wiley further show wherein said at least one of said one or more characterization records is an index creating using said one or more observation records (Wiley, col. 5 lines 10 17, col. 5 lines 63 67, col. 7 lines 35 51).
- 17. Regarding claims 135, 158 and 171, Khanolkar in view of Wiley further show wherein said at least one of said one or more characterization records is an index comprising one or more of: a type of or an importance level for a transmission event of said one or more transmission events, an internet protocol address of a node of said one or more nodes transmitted said transmission event, and an internet protocol address of a node of said one or more nodes being a destination of said transmission event (Wiley, col. 5 lines 10 17, col. 5 lines 63 67, col. 7 lines 35 51).

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- 18. Regarding claims 137, 160 and 173, Khanolkar in view of Wiley further show wherein said one or more characterization records comprise a summary of said one or more transmission events of said plurality of transmission events (Khanolkar, col. 2 lines 10 25, col. 5 line 65 col. 6 line 22, col. 8 lines 25 34).
- 19. Regarding claims 138, 161 and 174, Khanolkar in view of Wiley further show wherein at least one of said plurality of the transmission events is a notification (Khanolkar, col. 2 lines 10 67, col. 4 lines 15 30).
- 20. Regarding claims 139, 162 and 175, Khanolkar in view of Wiley further show wherein said one or more data elements comprise partial or complete data comprised in said at least one or more of the one or more transmission events (col. 4 lines 15 30).
- 21. Regarding claims 140, 150, 153, 154 and 176, Khanolkar in view of Wiley further show storing said one or more data structures comprising corresponding said one or more characterization records in a memory, in a non-volatile memory or in a data storage (Khanolkar, col. 7 lines 10 13).
- 22. Regarding claims 142, 163 and 178, Khanolkar in view of Wiley further show wherein one of said one or more characterization records comprise an aggregate summary of said at least one data structure and one or more of other data structures of said one or more data structures (Khanolkar, col. 2 lines 10 25, col. 5 line 65 col. 6 line 22, col. 8 lines 25 34).
- 23. Regarding claim 143, Khanolkar in view of Wiley further show where said network is configured to provide network activity data in a computer system comprising

a plurality of nodes interconnected for communicating via said network (Khanolkar, col. 2 lines 25 - 38).

- 24. Regarding claims 144, 164 and 179 Khanolkar in view of Wiley further show wherein all or selected transmission events of said plurality of the transmission events are notifications provided by all or selected nodes of said one or more nodes of said network (Khanolkar, col. 2 lines 16 67, col. 4 lines 15 30).
- 25. Regarding claims 145, 156, 165 and 180, Khanolkar in view of Wiley further show wherein said location or said locations of the one or more data elements are ins aid at least one data structure of said one or more data structures (Wiley, col. 5 lines 25 67, col. 7 lines 35 51).
- 26. Claims 136, 159 and 172 rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar in view of Wiley as applied to claims 129, 148 and 166 above, and further in view of Hellerstein (US 6,836,894 B1).
- 27. Regarding claims 136, 159 and 172, Khanolkar in view of Wiley show claims 136, 159 and 172, as well as wherein said at least one of said one or more characterization records is an index allowing transmission event viewing (Wiley, col. 5 lines 10 17, col. 5 lines 63 67, col. 7 lines 35 51).

Khanolkar in view of Wiley do not show viewing transmission events unabridged.

Hellerstein shows viewing transmission events unabridged (col. 7 lines 17 – 37)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Khanolkar in view of Wiley with that of Hellerstein

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in order to ensure the user has all data at his or her disposal to enable the most informed decision possible.

- 28. Claims 141, 155 and 177 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar in view of Wiley as applied to claims 129, 148 and 166 above, and further in view of Richard et al. (US 2005/0015461 A1), hereafter Richard.
- 29. Khanolkar in view of Wiley show claims 129, 148 and 166

Khanolkar in view of Wiley do not explicitly show storing records as a file system or as a hierarchical file system.

Richard shows using hierarchical file systems for storage ([111]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Khanolkar in view of Wiley with that of Richard in order to utilize a common type of file system (Richard, [111]).

- 30. Claims 146, 147, 181 and 182 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khanolkar in view of Wiley as applied to claims 129, 148 and 166 above, further in view of Microsoft Computer Dictionary, 5th Edition.
- 31. Regarding claims 146 and 181, Khanolkar in view of Wiley show claims 129, 148 and 166.

Khanolkar in view of Wiley do not explicitly show utilizing compression on the data structure.

Microsoft Computer Dictionary shows compression of files, such as data structures (pgs. 2-3 and 4 -5).

It would have been obvious to one of ordinary skill in the art at the time of the

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invention to modify the disclosure of Khanolkar in view of Wiley with that of Microsoft Computer Dictionary in order to utilize common ideas in computing environments, as well as to optimize the storage size of the data structure.

32. Regarding claims 147 and 182, Khanolkar in view of Wiley and Microsoft Computer Dictionary show creating a digital signature of said at least one data structures (Microsoft Computer Dictionary, pgs. 2 – 3 and 6).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. MacIlwinen whose telephone number is (571) 272-9686. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST; off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Andrew Caldwell/ Supervisory Patent Examiner, Art Unit 2442

John MacIlwinen

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